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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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AKIN, GUMP, STRAUSS, HAUER & FELD
711 LOUISIANA STREET
SUITE 1900 SOUTH
HOUSTON, TX 77002

EXAMINER

GILMAN, ALEXANDER

ART UNIT PAPER NUMBER

2833

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/039,138

Applicant(s)

BLOOMFIELD ET AL.

Examiner

Alexander Gilman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1, 2, ^{and} 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein et al.

With regard to claim 1, Klein et al (US 6,186,800) disclose a method for grounding a circuit board comprising the steps of:

attaching an stud (10a) to a chassis (Abstract, lines 1-3);

attaching a ground clip (9a);

positioning stud through a mounting hole (21); and

engaging the clip with the mounting stud.

With regard to claim 2, Klein et al disclose that the clip attached to an upper surface of the circuit board.

With regard to claim 6, Klein et al disclose receiving the mounting stud in a biased (slanted) clip opening.

1. Claims 1, 2, 5, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Paquin.

With regard to claim 1, Paquin (US 6,424,538) disclose a method for grounding a circuit board comprising the steps of:

attaching an stud (36) to a chassis;

attaching a ground clip (38) to the circuit board (78);

positioning stud through a mounting hole (40); and

engaging the clip with the mounting stud.

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With regard to claim 2, Paquin discloses that the clip attached to an upper surface of the circuit board (Fig. 5).

With regard to claims 5 and 6, Paquin discloses the mounting stud (36) extending through the mounting hole (40) and receiving the mounting stud in a biased clip opening (Fig. 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquin.

With regard to claim 3, Klein et al disclose all of the limitations except for soldering the ground clip to the circuit board.

To solder the ground clip to the circuit board, would have been an obvious matter of design absent any criticality, since the soldering, as a method of attaching of components to the circuit board is well known in the art.

With regard to claim 4, Paquin disclose the ground clip leads (68) extending through lead holes in the circuit board.

2. Claims 7, 9-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Deplech et al

With regard to claim 7, Klein et al (US 6,186,800) disclose a ground clip apparatus (9a) comprising:

an generally circular (portion surrounding the cylindrical stud) upper body portion (12a) having a side opening extending from the upper body portion, a plurality of retentive leads (14a) adapted for insertion through holes in a circuit board (2a).

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Klein et al do not disclose that a portion of clip body is adapted to spring open as the mounting stud nose enters the opening.

Deplech et al (US 4,875,140) disclose a portion (10) of clip body adapted to spring open as the mounting stud nose enters the opening.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Klein et al ground clip apparatus with a portion of clip body adapted to spring open .. as taught by Deplech et al, to utilize the elastic engagement of the clip and the mounting stud.

With regard to claims 9, 10, 12, 16, and 17, Klein et al when modified by Delpech et al, disclose biasing (16) the leads having teats (15a), said leads are substantially opposite to side opening (11a).

With regard to claims 11 and 19, Klein et al when modified by Delpech et al, disclose (Delpech et al) flared ends of the spring open body portion(10).

With regard to claims 13 and 15, Klein et al when modified by Delpech et al, inherently disclose a plurality of mounting studs, clips, and holes in the circuit board and disclose a nose (19a) of the mounting stud contacting the upper body of the grounding clip.

With regard to claim 14, Klein et al when modified by Delpech et al, disclose positioning the grounding clip with the side opening faces the mounting hole in the circuit board.

With regard to claim 20, Klein et al when modified by Delpech et al, disclose (Delpech et al) disclose the flexing ends (10) of the clip.

2. Claim 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al in view of Delpech et al and further in view of Sampson.

Klein et al when modified by Delpech et al disclose all of the limitations except for a plurality of stanchions

Sampson (US 5,108,312) discloses a plurality of stanchions (42)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Klein et al grounding clip with the plurality of stanchions, as taught by Sampson, for better engagement of the clip and the circuit board.

Response to Arguments

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Applicant's arguments filed 10/31/2002 have been fully considered but they are not persuasive. With regard to claim 1, Applicants argue that the prior art (Klein et al) fail to disclose positioning the mounting stud through the mounting hole, since the mounting stud is located on only one side of the board.

However, Claim 1 does not claim the mounting stud is extending through the board. On the other hand Klein et al disclose positioning the mounting stud through the mounting hole, since a screw, which is a component of the mounting stud and connected with a hole (22) of the stud through the mounting hole, will adjust position of the mounting stud (col. 5, lines 52-55).

With regard to claim 2, Applicants argue that the prior art (Klein et al) fail to disclose the ground clip attached to an upper surface of the circuit board.

According to Fig. 3 (Klein et al), elements (15a) attaching the clip to the circuit board are located on the upper surface of the circuit board

With regard to claim 6, Applicants argue that the prior art (Klein et al) fail to disclose a biased (slanted) clip opening.

As it was shown in the rejection, a word "biased" is interpreted as slanted (One of basic meaning according to Heritage Dictionary). In Fig. 4, Klein et al disclose the slanted (13) clip opening.

With regard to claim 9, Applicants argue that the prior art (Klein et al) fail to disclose a biased retentive lead.

According to Fig. 2, to fix the clip to the board (2a) the leads (15a) should be twisted (in direction 16).

With regard to claims 12 and 17, Applicants argue that the prior art (Klein et al) fail to disclose leads being substantially opposite to the side opening.

Since leads (15a) are distant from the opening and located in a plane perpendicular to a plane of the opening, they are considered as substantially opposite to the side opening.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and

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does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the structural feature of outwardly flared ends of the clip is generally known in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Gilman whose telephone number is (703) 305-0847. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Alexander Gilman


January 7, 2003